

Chapter 2. BROADCAST PROCEDURES

Section 1. GENERAL

2-1-1. TYPES OF BROADCASTS

Weather and flight information shall be broadcast/recorded by one or more of the following categories:

- a. Transcribed Weather Broadcast (TWEB).
- b. Telephone Information Briefing Service (TIBS).
- c. Hazardous Inflight Weather Advisory Service (HIWAS).
- d. Meteorological Information for Aircraft in Flight (VOLMET ICAO).

2-1-2. SPEECH RATE

Data shall be spoken at a rate of 100 to 120 words-per-minute.

2-1-3. INTERRUPTION OF BROADCAST

Interrupt broadcast only when you believe that a pilot requires immediate attention; e.g., to issue an airport advisory. When a pilot calls during a broadcast:

- a. Broadcast for a short interval on the frequency to which the pilot is listening simultaneously with the broadcast frequencies, and complete the aircraft contact immediately after the broadcast.
- b. If the pilot repeats the call, interrupt the broadcast and answer the call.

2-1-4. REDUCING RECORDED WEATHER INFORMATION SERVICES

Recorded weather information services (TWEB, VOR TWEB, and TIBS) may be reduced during the hours of 1800-0600 local time only. Resumption of full broadcast service should be adjusted seasonally to coincide with daylight hours. During the period of reduced broadcast, record a statement indicating when the broadcast will be resumed and to contact Flight Service for weather briefing and other services.

PHRASEOLOGY-

*THE (TWEB/TIBS) RECORDING IS SUSPENDED.
REGULAR RECORDED WEATHER SERVICE WILL BE
RESUMED AT (time) ZULU/ (time) LOCAL. FOR PILOT
WEATHER BRIEFING AND OTHER SERVICES*

*CONTACT A FLIGHT SERVICE FACILITY. CALL
1-800-WX-BRIEF.*

2-1-5. ANNOUNCING MISSING ITEMS

With the exception of RVR, announce the word "MISSING" when any items or components of a weather report are not reported, or in place of unreadable or obviously incorrect items or portions of weather reports. If the complete report is not available for broadcast, state the location and the word "MISSING." When appropriate, instead of speaking the name of several locations with missing reports, announce: "OTHER SCHEDULED REPORTS MISSING."

NOTE-

On occasion, a parameter from an automated observation may be reported as missing in the body of the report but is available as a manually reported parameter in the remarks section. When the report is spoken, include the manually reported element in its proper sequence within the report.

2-1-6. WEATHER REPORT PHRASEOLOGY

Use the following phraseology and procedures for radio-telephone communications and broadcast of surface weather observations:

a. Location.

1. Announce the geographic name (not the identifier) once for broadcasts.

2. When the location name is duplicated within 500 miles, follow the location name with the state name.

EXAMPLE-

"Wilmington, North Carolina."

"Wilmington, Delaware."

3. When weather reports originate at more than one airport at the same geographical location, identify the airport.

EXAMPLE-

"Chicago Midway."

"Chicago O'Hare."

4. Where it is considered necessary and is requested by the military base commander, broadcast military observations by stating the location, the name of the airport if different, and the controlling military branch.

EXAMPLE-

"Fort Riley, Marshall Army Air Field."

"Andrews Air Force Base."

"Norfolk Naval Air Station."

b. *Automated Observation.* If AUTO appears after the date/time element, follow the location announcement with the phrase "AUTOMATED."

PHRASEOLOGY-

(Location) AUTOMATED.

c. *Special Reports.* If a special report is available at the time of the broadcast, follow the location with the words "SPECIAL REPORT, (last two digits of the time) OBSERVATION."

d. *Wind Direction and Speed.* Announce wind direction and speed by stating the word WIND followed by the separate digits of the wind direction to the nearest 10 degrees and the separate digits of the speed. A "G" between two wind speed values is announced as GUSTS. Broadcast local wind as it appears in the report. Announce the variability of wind at the end of the wind group. (See TBL 2-1-1)

Wind Direction and Speed

| Wind | Phraseology |
|--------------------|---|
| VRB04KT | WIND VARIABLE AT FOUR. |
| 00000KT | WIND CALM. |
| 26012KT | WIND TWO SIX ZERO AT ONE TWO. |
| 29012KT 260V320 | WIND TWO NINER ZERO AT ONE TWO WIND VARIABLE BETWEEN TWO SIX ZERO AND THREE TWO ZERO. |
| 30008KT | WIND THREE ZERO ZERO AT EIGHT. |
| 36012G20KT | WIND THREE SIX ZERO AT ONE TWO GUSTS TWO ZERO. |

TBL 2-1-1

e. *Visibility.* Announce visibility as follows:
(See TBL 2-1-2.)

Visibility

| Contraction | Phraseology |
|----------------------------------|-----------------------------------|
| M ¹ / ₄ SM | VISIBILITY LESS THAN ONE QUARTER. |
| 0SM | VISIBILITY ZERO. |
| ¹ / ₁₆ SM | VISIBILITY ONE SIXTEENTH. |
| ¹ / ₈ SM | VISIBILITY ONE EIGHTH. |
| ³ / ₄ SM | VISIBILITY THREE QUARTERS. |
| 1 ¹ / ₂ SM | VISIBILITY ONE AND ONE-HALF. |
| 8SM | VISIBILITY EIGHT. |
| 25SM | VISIBILITY TWO FIVE. |

TBL 2-1-2

NOTE-

When visibility is less than 3 miles and variable, the variable limits will be reported in the remarks.

f. *RVR.* When RVR is reported, announce in accordance with TBL 2-1-3. Omit RVR when it is not reported. Do not announce as missing.

RVR

| Contraction | Phraseology |
|--|---|
| R16/M0600FT | RUNWAY ONE SIX VISUAL RANGE LESS THAN SIX HUNDRED. |
| R17L/2400V 3000FT | RUNWAY ONE SEVEN LEFT VISUAL RANGE VARIABLE BETWEEN TWO THOUSAND FOUR HUNDRED AND THREE THOUSAND. |
| R28L/3500FT | RUNWAY TWO EIGHT LEFT VISUAL RANGE THREE THOUSAND FIVE HUNDRED. |
| R35R/P6000FT | RUNWAY THREE FIVE RIGHT VISUAL RANGE MORE THAN SIX THOUSAND. |
| Note: "R-V-R" may be spoken in lieu of "visual range." | |

TBL 2-1-3

g. *Weather Elements.* Table 2-1-4 depicts sample phraseology for weather element contractions. Intensity refers to precipitation, not descriptors. Proximity is spoken after the phenomenon to which it refers. Descriptors are spoken ahead of weather phenomenon with the exception of "showers" which is spoken after the precipitation. Table TBL 2-1-8 contains a complete list of weather elements and appropriate phraseology.

Examples of combining intensity, descriptors and weather phenomenon.

| <i>Contractions</i> | <i>Phraseology</i> |
|---------------------|---|
| BLSN | BLOWING SNOW. |
| FZDZ | FREEZING DRIZZLE. |
| FZRA | FREEZING RAIN. |
| -FZRAPL | LIGHT FREEZING RAIN, ICE PELLETS. |
| MIFG | SHALLOW FOG. |
| SHRA | RAIN SHOWERS. |
| +TSRA | THUNDERSTORM, HEAVY RAIN (SHOWERS) ¹ . |
| TSRA | THUNDERSTORM, RAIN. |
| +TSRAGR | THUNDERSTORM, HEAVY RAIN, HAIL. |
| -SHRA | LIGHT RAIN SHOWERS. |
| SHSN | SNOW SHOWERS. |
| VCSH | SHOWERS IN THE VICINITY. |

¹Since thunderstorms imply showery precipitation, "showers" may be used to describe precipitation that accompany thunderstorms.

TBL 2-1-4

h. Ceiling and sky coverage.

1. Broadcast Sky Coverage in the same order as reported on the weather observation. Announce ceiling as follows: (See TBL 2-1-5.)

Ceiling and Sky coverage

| <i>Designator</i> | <i>Phraseology</i> |
|------------------------------|-------------------------------------|
| BKN000 ¹ | SKY PARTIALLY OBSCURED. |
| BKN000 ² | CEILING LESS THAN FIVE ZERO BROKEN. |
| FEW000 ¹ | SKY PARTIALLY OBSCURED. |
| FEW000 ² | FEW CLOUDS AT LESS THAN FIVE ZERO. |
| SCT000 ¹ | SKY PARTIALLY OBSCURED. |
| SCT000 ² | LESS THAN FIVE ZERO SCATTERED. |
| (lowest layer aloft) BKN/OVC | (precede with) CEILING. |
| VV | INDEFINITE CEILING. |

¹ Surface-based obscurations. Requires remarks, i.e. RMK FG SCT000, FU BKN000, etc.
² No remark means the layer is aloft.

TBL 2-1-5

2. State cloud heights in tens, hundreds and/or thousands of feet. (See TBL 2-1-6.)

Cloud heights

| <i>Number</i> | <i>Phraseology</i> |
|------------------|-----------------------------|
| 000 ¹ | ZERO. |
| 003 | THREE HUNDRED. |
| 018 | ONE THOUSAND EIGHT HUNDRED. |
| 200 | TWO ZERO THOUSAND. |

¹ Spoken as zero only when used with VV.

TBL 2-1-6

NOTE-

When the ceiling is less than 3,000 feet and variable, the variable limits will be reported in the remarks.

3. Announce sky conditions as indicated. (See TBL 2-1-7.)

Sky conditions

| <i>Contraction</i> | <i>Phraseology</i> |
|--------------------|-------------------------------|
| BKN | (height) BROKEN. |
| CLR ¹ | CLEAR BELOW ONE TWO THOUSAND. |
| FEW | FEW CLOUDS AT (height). |
| SCT | (height) SCATTERED. |
| SKC | CLEAR. |
| OVC | (height) OVERCAST. |

¹ Automated weather reports.

TBL 2-1-7

Weather Elements

| QUALIFIER | | | | WEATHER PHENOMENA | | | | | |
|-----------------------------------|----------------------------|---------------------|--------------|------------------------|-------------------------------------|----------------------|--------------|----------------|---------------------------------|
| INTENSITY or PROXIMITY 1 | | DESCRIPTOR 2 | | PRECIPITATION 3 | | OBSCURATION 4 | | OTHER 5 | |
| - | Light | MI | Shallow | DZ | Drizzle | BR | Mist | PO | Well-Developed Dust/Sand Whirls |
| | | BC | Patchy | RA | Rain | FG | Fog | SQ | Squalls |
| | Moderate (No Qualifier) | DR | Low Drifting | SN | Snow | FU | Smoke | FC | Funnel Cloud, |
| | | | | | | | | +FC | Tornado or Waterspout |
| | | BL | Blowing | SG | Snow Grains | DU | Dust | SS | Sandstorm |
| + | Heavy | SH | Showers | IC | Ice Crystals | SA | Sand | DS | Duststorm |
| | | TS | Thunderstorm | PL | Ice Pellets | HZ | Haze | | |
| VC | In the Vicinity | FZ | Freezing | GR | Hail | PY | Spray | | |
| | | PR | Partial | GS | Small Hail or Snow Pellets (< 1/4") | VA | Volcanic Ash | | |
| | | | | UP | *Unknown Precipitation | | | | |
| * Automated stations only. | | | | | | | | | |

TBL 2-1-8

4. The following are examples of broadcast phraseology of sky and ceiling conditions:
(See TBL 2-1-9.)

Sky and ceiling conditions

| Condition | Phraseology |
|---|---|
| BKN000 BKN010 BKN050 RMK FG BKN000 | SKY PARTIALLY OBSCURED, CEILING ONE THOUSAND BROKEN, FIVE THOUSAND BROKEN. FOG OBSCURING FIVE TO SEVEN EIGHTS OF THE SKY. |
| BKN010 | CEILING ONE THOUSAND BROKEN. |
| SCT000 SCT020 OVC035 RMK FG SCT000 | SKY PARTIALLY OBSCURED, TWO THOUSAND SCATTERED, CEILING THREE THOUSAND FIVE HUNDRED OVERCAST. FOG OBSCURING THREE TO FOUR EIGHTS OF THE SKY. |
| SCT020 OVC250 | TWO THOUSAND SCATTERED, CEILING TWO FIVE THOUSAND OVERCAST. |
| VV000 | INDEFINITE CEILING ZERO. |
| VV012 | INDEFINITE CEILING ONE THOUSAND TWO HUNDRED. |

TBL 2-1-9

i. *Temperature and Dew Point.* Announce temperature and dew point in degrees Celsius. Temperatures below zero are preceded with an M and are announced by prefixing the word MINUS to the values. When the temperature and dew point spread is greater than 3 degrees, broadcast only the temperature. (See TBL 2-1-10.)

Temperature and Dew Point

| Value | Phraseology |
|--------|---|
| 02/M01 | TEMPERATURE TWO, DEW POINT MINUS ONE. |
| 14/09 | TEMPERATURE ONE FOUR. |
| 36/34 | TEMPERATURE THREE SIX, DEW POINT THREE FOUR. |

TBL 2-1-10

j. *Altimeter Setting.* Announce the four digits of the altimeter setting. (See TBL 2-1-11.)

Altimeter Setting

| | Phraseology |
|-------|-------------------------------------|
| A2989 | ALTIMETER TWO NINER EIGHT NINER. |
| A3025 | ALTIMETER THREE ZERO TWO FIVE. |

TBL 2-1-11

k. *Remarks.* Announce pertinent remarks. Do not broadcast additive data or other information intended for NWS analysis or processing that does not contribute to the description of the weather occurring at the station. (See TBL 2-1-12.)

Remarks

| Remarks | Phraseology |
|-----------------------|--|
| ACSL OVR RDG SW | STANDING LENTICULAR ALTOCUMULUS OVER RIDGE SOUTHWEST. |
| FG SCT000 | FOG OBSCURING THREE TO FOUR EIGHTHS OF SKY. |
| FU SCT012 | SMOKE LAYER ONE THOUSAND TWO HUNDRED SCATTERED. |
| SCT020 V BKN | TWO THOUSAND SCATTERED VARIABLE BROKEN. |
| SHRA E | RAIN SHOWERS, EAST. |
| TS OHD MOV E LTGCG | THUNDERSTORM OVERHEAD MOVING EAST. LIGHTNING CLOUD TO GROUND. |
| VIS 3/4V1 1/2 | VISIBILITY VARIABLE BETWEEN THREE QUARTERS AND ONE AND ONE HALF. |
| VIS NE 3 S 2 | VISIBILITY NORTHEAST THREE, SOUTH TWO. |

TBL 2-1-12

2-1-7. CURRENT DATA

An aviation surface report is considered current for 1 hour beyond the standard time of observation (H+00) unless superseded by a special or local observation or by the next hourly report. Do not broadcast obsolete data.